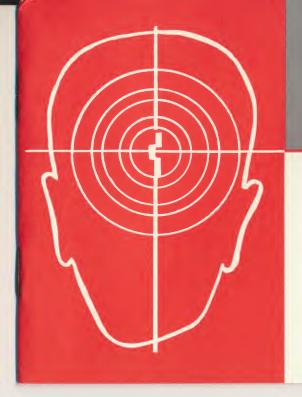


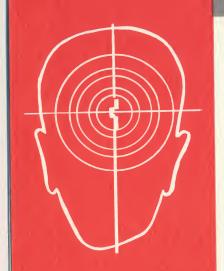


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# NEW IDEAS

To Help You Solve Your Switching Problems....



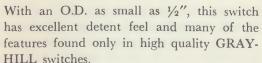
### Switch Innovations

give you greater circuit flexibility and simplify switching procedure

The following pages highlight some of the latest Grayhill developments in Miniature Rotary and Push Button Switches. Switches for printed circuit and security applications, spring return switches, and lighted push button switches are among the NEW innovations presented here. These switches were developed to satisfy specific, existing needs

in the electronic market and offer advantages and features heretofore unavailable in in standard line switches. The manufacturing standards for these new switches are of the same quality standards that have maintained Grayhill Switches on the preferred lists everywhere for many years.



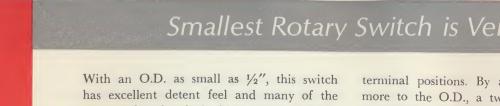


For example, choose between adjustable or fixed stops, standard solder lug or PC terminals, commercial or military styles and with multi-poles (commons) circuits. The 1/2" O.D. switch comes with up to ten active

terminal positions. By adding a mere .07" more to the O.D., a twelve position switch is possible with one pole, six positions with two poles, or three positions with four poles. Anticipated life is dependent upon current levels that are switched. 50 milliamperes (115 VAC resistive) for 25,000 cycles are typical for a life limiting criteria of 20 milliohms maximum contact resistance.

For Complete Information CIRCLE 1 red number on the right

GRAYHILL... the Difference Between Excellent and Adequate





#### Rotary Switches for Your Printed Circuitry

Now you can mount the field proven Gray-hill Series 8 Rotary Switch, directly on your printed circuit board - easily - efficiently - without wires. New PC Terminals insert directly into your board, permitting conventional wave soldering techniques to be employed to complete the assembly. The small diameter switch is available with one

to twelve decks, one or two poles per deck, 36° angle of throw, two to ten positions in a one pole per deck switch and two to five positions per pole in a two pole per deck switch. It is rated to make and break, ½ amp. at 115 VAC resistive, or carry 4 amps continuous. Life expectancy 100,000 cycles of operation normally.

For Complete Specifications
CIRCLE 2
red number on the right



#### Right Angle Push Button Switch for Your PC Boards

SPDT (two circuit) momentary contact push button switch plugs right into 100 mil center printed circuit boards. Flush mounted switches (Series 39-201) are a .250 "high" and stand-off mounted switches (Series 39-204) are .325 "high." Each occupy less than 1/2 a square inch. Gold plated terminals pro-

vide for conventional soldering or permit wave soldering techniques. These switches carry a <sup>1</sup>/<sub>4</sub> amp. rating at 115 VAC resistive with 250,000 operations normally. Besides standard switching applications, they can be also used as circuit test switches and shorting switches for PC board removal.

For Complete Specifications
CIRCLE 3
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2

3

4

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8



#### Make Your Circuitry Tamperproof!

A flush-mount, rotary lock switch has been developed for use in critical and security circuits. Authorized personnel with keys can rotate the shaft. Switching circuits can only be accomplished with the key in position. The lock switch is available in either the

Series 42 or Series 44 Standard, Spring Return and Military types. These switches are available with shorting or non-shorting contacts, and offer a choice of angle of throw, number of poles per deck, number of positions per pole, etc.





#### Prevent Accidental Rotation to Critical Positions

A built-in safety feature, by Grayhill, provides isolation of critical rotary switch positions. The isolated position mechanism makes accidental turning of the switch rotor to the critical positions impossible. Any combination of switch positions can be isolated. A push or pull of the rotary switch shaft (either can be had in a switch) is necessary prior to turning the shaft to the isolated posi-

tions. Likewise, a push or a pull of the rotary shaft is required to turn from the isolated positions. This safety feature for rotary switches is available in 30°, 36° and 45° angle of throw. Typical applications involve such named terminals as "off", "calibrated", or "standby", for which contact should not be made inadvertently.

For Complete Specifications
CIRCLE 5
red number on the right

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#### A Family of Spring Return Rotary Switches

Now Spring Return Rotary Switches are available in a wider selection of electrical ratings and sizes. Basic spring return configurations include one momentary position clockwise to one or more detent positions; one momentary position counter-clockwise to one or more detent positions; or one momentary position each side of the detent position. Spring Returns are now available in the improved military style, Grayhill Rotary

design providing exceptional insulation resistance and dielectric strength characteristics, and in 30° and 36° angles of throw. Here again, Grayhill miniaturization gives you switch diameters as small as 0.687" and depth behind panel of less than 1". Make and break currents up to 1 ampere at 115 VAC resistive load are available. Life expectancy up to 100,000 cycles of operation, depending on electrical ratings.

For Complete Specifications
CIRCLE 6
red number on the right

#### Lighted Push Button Switches

When an indicator lamp and a SPST (N.O. or N.C.) switch is required in one package, Grayhill's Series 40 Lighted Push Button Switches offer you a range of colored lenses with either incandescent or neon lamps. The lamp and switch are on separate circuits.

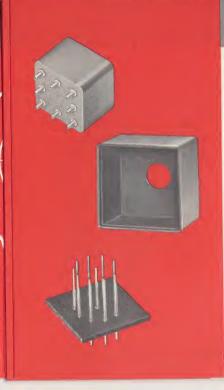
The switch is rated to make and break 1 ampere at 115 VAC resistive load with life expectancy of 500,000 cycles of operation. Overall length is 1.85" with button fully extended and only 1.15" behind panel. Button travel (light does not move) is .067" approximately.

For Complete Specifications
CIRCLE 7
red number on the right

GRAYHILL... the Difference Between Excellent and Adequate







#### Miniature Custom Moldings

Module Cases, Headers, and Terminal Boards are stock items. Special sizes and shapes are custom molded to the purchaser's prints. Thermosetting materials include Diallyl, Epoxy, Melamine and Phenolics —

terminals are gold plated brass. Experience and 100% inspection produce finished parts ready for the assembly line. Check Grayhill MOLDTRONICS for all your thermosetting plastic molded parts.

For Complete Specifications
CIRCLE 8
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#### BUSINESS REPLY CARD

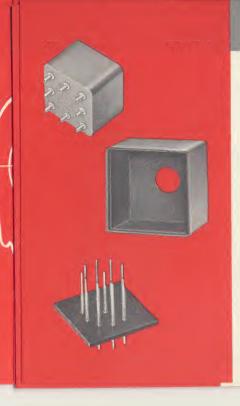
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For Complete Specifications
CIRCLE 8
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